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Factors Which Influence Recidivism Rates for Individuals at a Regional Treatment Center (RTC) Who Have Been Dually Diagnosed with Mental Illness/Chemical Dependency (MI/CD)

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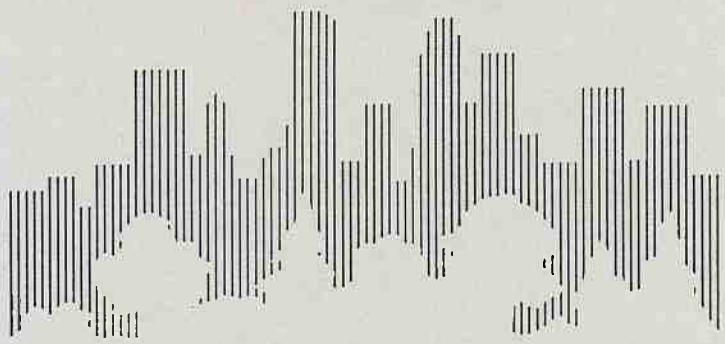

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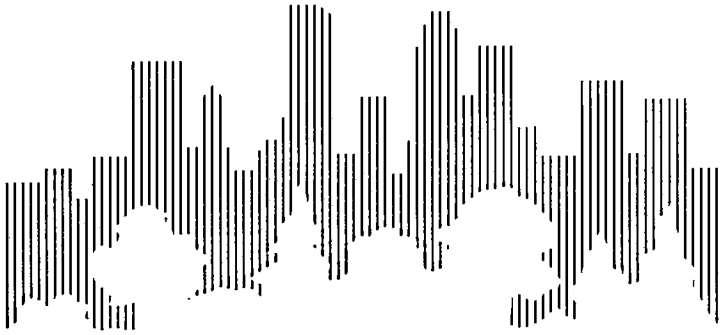

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By
Gina Marie Schmerler

A Thesis Submitted to the Graduate Faculty
of Augsburg College
in Partial Fullfillment of the Requirements
for the Degree
Master of Social Work

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Abstract

This exploratory study was conducted to examine factors associated with the recidivism rate of hospitalization admissions for individuals who have been admitted to a mentally ill and chemically dependent unit at a local Regional Treatment Center (RTC). The subject population consists of 23 men and 7 women between the ages of 19-49 years of age who have been court-mandated to the state treatment facility due to severe psychological disorders. For the purpose of this study, the term recidivism is defined as readmission to the facility within one year of discharge. The data were drawn from existing records, such as psychosocial reports, social work assessments, court commitment reports, and history & physical examination reports. To ensure the confidentiality of the patients, all identifying factors have been excluded from the discussion. The findings indicate that six factors such as diagnosis, family support, community involvement, social networks, medication compliance and discharge planning all reduce the occurrence of recidivism. Data gathered in this study indicate that a recidivism rate of approximately 10% currently exists on the ward. This percentage is similar to data which was gathered during the 1994 hospital wide recidivism study.

SECTION ONE: INTRODUCTION

Overview

The purpose of this study is to examine the factors that influence recidivism rates for individuals at a state regional treatment center (RTC) who have been dually diagnosed with mental illness and chemical dependency (MI/CD). Dual diagnosis is defined as any individual who can be diagnosed with mental illness and with chemical dependency (Smith, 1994).

This section provides a description of the historical component that has influenced the mental health system in this state. The origin of interest for this researcher, the theoretical framework, the research question and the hypothesis will also be discussed.

Historical Component

The Minnesota mental health system currently consisting of seven RTC's has undergone a variety of changes throughout the past 130 years since it's inception. Several terms have been used to describe state mental health facilities such as hospital, asylum and residential treatment facility. A brief timeline of dates for the establishment of mental health facilities in Minnesota follows:

1866: Minnesota Hospital for Insane-St. Peter, MN

1879: Hospital for the Insane-Rochester, MN

1890: Hospital for the Insane-Fergus Falls, MN

1900: Asylum for the Insane-Anoka, MN

Asylum for the Insane-Hastings, MN

1911: Asylum for Dangerously Insane-St. Peter, MN

1938: Moose Lake Hospital for Insane-Moose Lake, MN

1950: Hospital for Insane-Brainerd, MN

1968: Deinstitutionalization of many individuals with mental illness in Minnesota.

1985: Minnesota state hospitals changed their names to Regional Treatment Centers (RTC Orientation)

The first program (at this RTC) that specialized solely in the treatment of chemical dependency began in 1970. In 1980 a specific building was constructed to treat individuals with mental illness and chemical dependency (Orientation Information, 1994).

Origin of Interest

This researcher has chosen to explore the topic of factors that lead to recidivism for clients with a dual diagnosis due to the particular importance of this issue in the field of social work. Research indicates that the "revolving door phenomena" of recidivism in state operated treatment facilities for individuals who are mentally ill and chemically dependent is an issue that requires societal concern (Geller, 1992).

Theoretical Framework

The vulnerability model and the self medication model are contrasting theories that are both widely accepted as possible causes of chemical abuse in dually diagnosed clients (Silver, 1994).

The vulnerability model states that mentally ill clients are inherently predisposed for psychotic behavior and that their psychosis is exacerbated by their chemical abuse. It is believed that drug use precedes the onset of mental illness (Silver, 1994).

Advocates of the self medication theory hypothesize that mentally ill patients self medicate by abusing chemicals to achieve an internal sense of equilibrium, which in turn further exacerbates the natural psychosis of the mental illness. Individuals who are dually diagnosed use chemicals to alleviate apathy, withdrawal and psychotic symptoms (Smith, 1994). It is hypothesized that mental illness precedes the onset of drug use (Silver, 1994; Smith, 1994).

Research Question

What factors influence the recidivism rate for individuals who have been dually diagnosed as mentally ill and chemically dependent at a state run regional treatment center?

Hypothesis

The following six factors have been identified in separate studies as influencing the recidivism rate of hospitalization admissions for dually diagnosed individuals. This researcher has chosen to study how all these factors, combined together, influence the recidivism rates for patients in a local RTC.

-proper diagnosis of the disorder and appropriate treatment (Simon, 1996; Amer, 1996; Berti, 1994).

-family support (Turner, 1993; Dietzen, 1993; Fisher, 1992).

-reintegration into the community (Turner, 1993; Fisher, 1993; Appleby, 1993; Citrome, 1994).

-social networks; including family and friends, community psychiatrist, support groups for mental illness, job training (Turner, 1993; Dietzen, 1993; Fisher, 1992).

-the client's ability to accurately take the prescribed dose of medication (Simon, 1996; Amer, 1996; Kent, 1994; Casper, 1993).

-discharge planning and adjustment back into the community (Turner, 1993; Fisher, 1993; Appleby, 1993; Citrome, 1994).

Summary

The purpose of this study is to determine whether the above stated six factors influence recidivism rates for dually diagnosed clients at a local RTC.

SECTION TWO: REVIEW OF THE LITERATURE

Overview

This integrative literature review focuses on the origin of recidivism and the six factors that this researchers believes influence recidivism; diagnosis, family support, community involvement, social networks, medication compliance and discharge planning.

Origin of Problem

The 1990 Epidemiologic Catchment Area Study in the United States indicated that MI/CD individuals tend to have lifetime dual diagnosis problems (Smith, 1994).

The Catchment Area Study found that 87% of people with antisocial personality disorders and 56% of those with bipolar mood disorders continue to have problems with mental illness and chemical abuse throughout the course of their lives. These findings indicate that over half of the persons with antisocial personality disorders or bipolar mood disorders are unable to successfully overcome issues regarding their dual diagnosis. Furthermore, 47% of those persons diagnosed with schizophrenia and 32% of those with depressive disorders also continue to experience MI/CD problems (Smith, 1994).

Clients are legally committed to state mental facilities where their mental illness is stabilized through the use of medication and then they are able to be reintegrated into society (Silver, 1994). The clients are discharged to residential facilities in the community

with the hope that their mental illness will remain stabilized on prescribed medications (Smith, 1994).

Casper and Regan (1993) have found that medication non-compliance, suicide attempts, and violent acts prior to admission also increase recidivism rates in state mental facilities.

Studies indicate young male clients in their twenties are being readmitted to state run treatment facilities at a higher rate than clients in other age groups. It has been suggested that clients in this age group are most actively in a changing phase of their mental illness, thus making them a challenging population to treat. For example, symptoms of schizophrenia tend to surface for many individuals during their twenties. Therefore, the addition of chemical use further exacerbates the difficulties of treating a schizophrenic client whose symptoms of mental illness are currently evolving (Fisher, 1992).

Studies indicate that the link between mental illness and chemical dependency is often difficult to separate. It is nearly impossible to determine the relationship between schizophrenic symptoms and those caused by chemical abuse, as suggested by the vulnerability model and the self medication model (Berti, 1994). Research studies have found that larger treatment units that can accommodate thirty or more patients tend to have longer hospital durations (Citrome, 1994).

Silver's (1994) study indicates that clients who participate in social networks such as support from community mental health agencies, family involvement and support, and participation in

career development programs have a reduced incidence of recidivism.

Roman (1984) states that a variety of social and environmental factors influence the rate of recidivism. In his study, the following issues were examined: duration of hospitalization admissions, number of previous admissions, ability to work, type of housing placement (Rule 36, nursing home, independent living, etc.) and social support from family and friends. Results from Roman's study indicate that strong, positive social supports from family and friends decrease the incidence of recidivism.

Six Factors of Recidivism

Diagnosis

Simon (1996) states that when treating dually diagnosed clients it is necessary to begin the treatment process by focusing on the issues around chemical dependency.

Fifty to eighty percent of the alcoholics entering an initial period of sobriety meet the criteria for a diagnosis of depression. Statistics indicate that 90% of alcoholics who experienced depression prior to treatment experience a remission of depressive symptoms within two to four weeks of detoxification if they remain abstinent (Amer, 1996). Psychiatric symptoms can not be adequately addressed and treated until the individual has abstained from the use of chemicals; the main reason for this statement is that addictive chemicals override the benefits of psychiatric treatment for many individuals (Amer, 1996). It has been found that an alcoholic with untreated depression will have difficulty

maintaining sobriety, and a patient with depression and untreated alcoholism will not respond to anti-depressants (Amer, 1996).

When making an initial diagnosis, it is imperative that the doctor recognize and develop a treatment plan for both aspects of the dual diagnosis (Amer, 1996). While chemical dependency treatment should occur prior to the treatment of mental illness, both diagnosis must be considered in the assessment phase (Amer, 1996). Dually diagnosed clients are often misdiagnosed and their dual symptoms are inadequately treated. Some commonly made assumptions are:

-the client is drinking in excess and is chemically dependent but does not have mental illness issues.
-the client is not addicted to chemicals, only self-medicating to deal with mental illness issues (Amer, 1996).

Schizophrenia is the most common diagnosis for dually diagnosed clients. The combination of substance abuse and schizophrenia leads clients to maintain a chronic condition of dual diagnosis. The relationship between the two is difficult to separate, since many symptoms overlap (Berti, 1994).

Family Support

Studies indicate that the level of family support and involvement is related to the successful prognosis of individuals who have been dually diagnosed. Low levels of family support are often correlated to poor prognosis for the client, whereas high

levels of family involvement are common in individuals with positive prognosis (Berti, 1994).

A variety of factors influence family support such as the severity of the disorder, length of time that the family has been coping with the illness, behavioral patterns of the dually diagnosed individual, relationship between the family and the person with MI/CD, and the family's perspective regarding the illness (Turner, 1993).

Many aspects of mundane family life are also affected, such as the overall mood and atmosphere of the household, family roles and rules, standing that the family maintains within the community, and the families ability to problem-solve (Greenberg, 1993).

Many MI/CD treatment programs offer educational components for the family members based on family therapy, education regarding the dual diagnosis and support groups for family members of individuals with mental illness (Simon, 1996).

Community Involvement

The Mental Health Demographic Profile System (MHDPS) designed by the National Institute of Mental Health (NIMH) states that socioeconomic status, ethnicity, degree of community stability, and degree of area homogeneity are unique identifiers for community populations at risk for mental health problems and recidivism (Turner, 1993). The demographic profile system study found that geographic areas that are experiencing high rates of admissions to mental health facilities and of recidivism tend to be going through significant social changes, such as population transiency,

significant urban renewal and changes in racial and ethnic compositions. Therefore, community instability often induces stress and in turn creates a higher rate of recidivism for individuals with mental illness (Turner, 1993).

Statistics indicate that the availability of mental health resources in a geographic area lead to a lower percentage of patients who are rehospitalized in public facilities. It is believed that this phenomenon is due to the trend towards integrating mental health systems with other community based resources and improving the comprehensiveness of patient care (Turner, 1993).

Sheafor suggests that there is a strong relationship between recidivism and specific community characteristics. The community ecology perspective emphasizes the importance of factors such as social unity, social networks, and social disorganization which influence the positive functioning capacity of the dually diagnosed individual. The ecosystems perspective states the necessity of viewing the client in terms of the environment in which he lives (Sheafor, 1994).

The ultimate goal is to provide treatment services in the most accessible way and in the least restrictive environment, which draws upon available community resources and the natural support network (eg. family, friends, work colleagues, etc) of the client. In spite of the attempts to streamline services, dually diagnosed clients tend to use a disproportionate number of services, such as medical services, legal advice, crisis intervention, etc (Smith, 1994).

It has been suggested by Smith that dually diagnosed individuals living in urban areas tend to use chemicals for a variety of reasons, such as social interaction, subculture acceptance and for identity formation that involves a label other than that of mentally ill (Smith, 1994). Casper points out that chemical abuse in urban areas often leads to criminality and violence. Drugs that are commonly bought can have detrimental side-effects. For example, amphetamines, cocaine, cannabis, and alcohol can exacerbate psychotic symptoms, violence, paranoid delusional beliefs and hallucinations, whereas solvent abuse (eg. gasoline, glue) is often linked with brain syndromes and psychosis (Casper, 1993).

Dually diagnosed individuals who have the main diagnosis of schizophrenia tend to exhibit more violent behavior than populations with other diagnosis of mental illness (Smith, 1994). Smith (1994) states that individuals with anti-social personality traits and behaviors are more likely to be discharged from treatment programs too early due to undesirable behavior, thus not truly completing or gaining the benefits of treatment.

Social Networks

An inability to relate to societal norms places individuals with MI/CD diagnosis in direct conflict with other residents in the community leading to decreased societal connectedness for the dually diagnosed individual. The inability of these individuals to manage their lives in the community is due to a lack of understanding of societal norms, which is direct evidence of cognitive disorganization associated with dual diagnosis (Turner,

1993). Involvement with a case manager can help alleviate some of this type of disconnectedness that occurs between the client and the community. The ideal case management situation occurs when the worker has a relatively small client caseload (eg. 8-10 clients) and is able to meet with the client in the home environment rather than an office. (Dietzen, 1993). Effectiveness of case management services has been linked to the intensity of services provided. A high degree of intensity in providing case management services leads to more positive responses from clients, whereas a low level of case management intensity evokes a negative response from clients. The main reason for this phenomena is that high levels of case management involvement are interpreted by clients as a higher degree of devotion to their specific issues. The role of the case manager is to help the client deal with everyday issues as well as to provide client advocacy (Dietzen, 1993).

Studies indicate that the type of social network that a dually diagnosed individual is enmeshed in will be a determinant of the type of mental health services that they use (Turner, 1993). Researchers have found that the amount and variety of services that clients utilize dramatically decreases the incidence of hospitalization. Support networks decrease the incidence of recidivism for clients (Dietzen, 1993). A range of comprehensive services such as group and individual therapy, behavioral therapy, vocational training, patient education, and housing assistance have been found to be the most useful when dealing with issues related to dual diagnosis (Fisher, 1992).

Medication Compliance

Casper (1993) states that one of the most prominent characteristics of the recidivist population is patient medication non-compliance. Researchers believe that many explanations exist regarding medication non-compliance, such as the patient's lack of insight regarding the illness, patient's limited knowledge regarding the benefits of proper medication, patient's denial that medication is needed or that an illness exists, and general cognitive decompensation that limits the patient's ability to take the prescribed dosage (Kent, 1994).

It is important to educate the client regarding the fact that medication doesn't treat the addiction and that the addictive abuse of chemicals needs full behavioral examination. For example, medication compliance will help alleviate symptoms of the mental illness, but behavioral modifications are necessary to change the addictive behavior (Amer, 1996).

Discharge Planning

Discharge planning is often dictated by the length of stay that is mandated by the client's Health Maintenance Organization (HMO). Fishel asserts that many HMO's provide limited mental health coverage, thereby short changing the treatment of mental health issues in the interest of economy. The trend in mental health treatment is towards short term, outpatient therapy as opposed to long term comprehensive treatment. Fishel found that this decision by HMO's leads to an increased rate of recidivism in managed care

facilities as opposed to lower recidivism rates in fee-for-service organizations (Fishel, 1993).

Statistics indicate that facilities with the longest mean length of stay for inpatient treatment is on units which hold 30 beds or more (Citrome, 1994). Appleby asserts that short hospital stays, defined as 21 days or less often result in higher rates of recidivism. Many HMO's encourage short inpatient treatment with follow up care (eg. group/individual therapy, psychiatric care) in the community. The discrepancy occurs when follow up care is not comprehensive to deal with the many dimensions of a dual diagnosis client, thus resulting in a break down in the continuum of care which leads to a higher rate of recidivism (Appleby, 1993).

SECTION THREE: METHODOLOGY

Overview

This study is an analysis of secondary data in which a total of 30 records were reviewed. The methodology section will describe the study subjects, the data collection instrument, an operational definition, a description of the procedures, and an overview of the research design.

Study Subjects

The RTC in this study provided services to 1553 patients with mental illness in 1994, and of this number approximately 700 were dually diagnosed as MI/CD (RTC Newsletter, 1995).

Deinstitutionalization in the 1960's led to a decrease in the population of state psychiatric hospitals and an increase in the number of chronic recidivists or "revolving door patients" who may have as many as 100 emergency room or hospital admissions in their lifetime. Recidivists have multiple hospitalizations rather than the prolonged care that was common during the institutional period of the mental health systems history (Fisher, 1992).

The unit of analysis in this study is the MI/CD population at a local RTC. The reason why this unit was chosen for the research study was to determine the recidivism rate for individuals who have been dually diagnosed as MI/CD and treated at this facility.

The MI/CD individuals are housed in a unit which is licensed for thirty seven patients. All individuals in this unit have been involuntarily mandated by the state court to receive a six month

inpatient MI/CD assessment and treatment. While the RTC provides services to individuals from a seven county area, the subjects on the unit at the time of this study were from four urban counties.

There were thirty three patients on the unit as of 2/29/96 and data were gathered from existing records of thirty patients. Records from three clients were excluded from the study to ensure anonymity. The age range of the subjects was 19-49 years old and consisted of 23 males and 7 females.

The physical setting of this RTC is unique because the campus of the treatment center consists of eight different buildings which are referred to as "cottages." Patients are housed in the different cottages based on the severity of their diagnosis.

Data Collection Instrument

A data collection form was designed and used to gather existing data from the patient chart. (See Appendix A). The data were gathered from the following sources: social work assessments, psychiatric assessments, psychological assessments, medical examination reports, and court commitment papers.

The data collection form focused on subject demographics including: gender, date of birth, race, educational level, employment status, religion, marital status, present length of stay and I.Q. Data was also gathered regarding the six factors that this study was based on such as, diagnosis, family support, community involvement, social networks, medication compliance and discharge plans.

Operational Definition

For the purpose of this study, recidivism was operationally defined as readmission to any inpatient mental health facility. However, incidence of recidivism at this RTC was calculated and determined by the total number of RTC admissions for each individual, within one year of discharge from this RTC.

Procedures

Since the study population consisted of potentially vulnerable adults, it was necessary to simultaneously present the research proposal to the Institutional Review Boards of the state RTC and Augsburg College. The proposal was then presented to the State Department of Human Services for final approval of the study. Since this study used only existing records and human contact with the subjects was not necessary for data gathering procedures, informed patient consent was not necessary.

To ensure anonymity, patient names had been excluded from the data and thus the data collection form referred to patients by medical identification number.

Factors that influence recidivism rates were measured by reviewing patients records and extracting relevant data from the charts. This information was then statistically analyzed using measures of central tendency such as the mean, median and mode.

Design

This study analyzed secondary data utilizing existing records to determine factors which influence recidivism rates for dually diagnosed clients. Issues regarding internal validity must be acknowledged for the researcher may have had pre-conceived notions regarding the accuracy of specific hospital assessments and familiarity with subjects.

Summary

The specific methods used to gather recidivism data has been detailed above. Existing records were reviewed for 30 subjects who were on the unit on 2/29/96. The following section will review the findings of this research.

SECTION FOUR: FINDINGS

Overview

This section provides a review of the study findings. Central tendencies were used to present all of the data. Findings regarding demographics and the six factors of recidivism (diagnosis, family support, community involvement, social networks, medication compliance and discharge planning) will be reviewed.

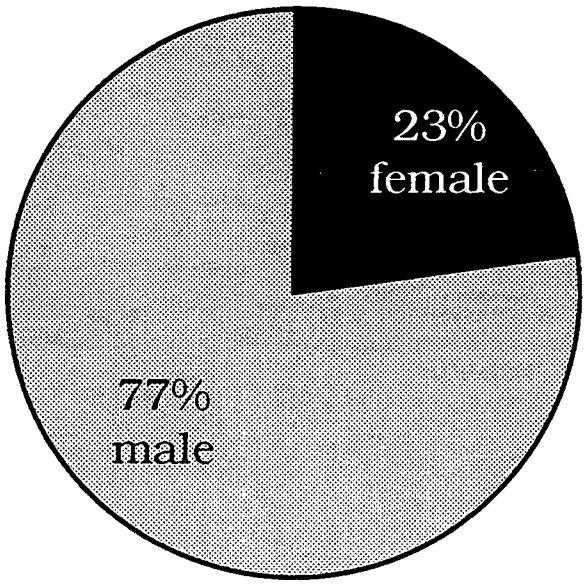
Demographics

Gender

The dual diagnosis unit is equipped to house 25 men and 12 women. At the time of this study, the unit had 23 male patients (77%) and 7 female patients (23%).

Figure 1

Gender of Patients

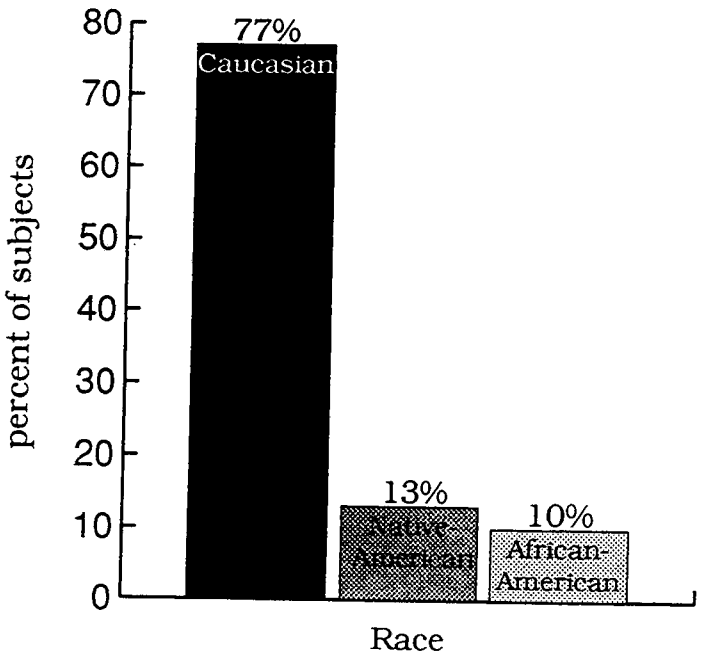


Race

The racial composition of this study was homogeneous. It consisted of 77% Caucasians, 13% Native Americans, 10% African Americans.

Figure 2

Race

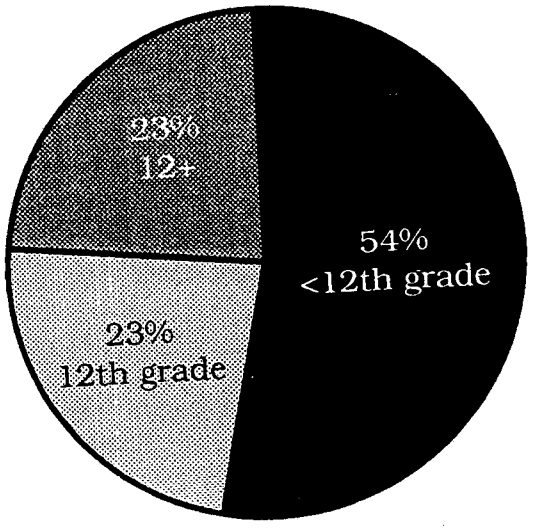


Level of Education

Data was collected regarding educational level completed. Fifty three percent of the patient's had less than a high school education.

Figure 3

Level of Education Completed

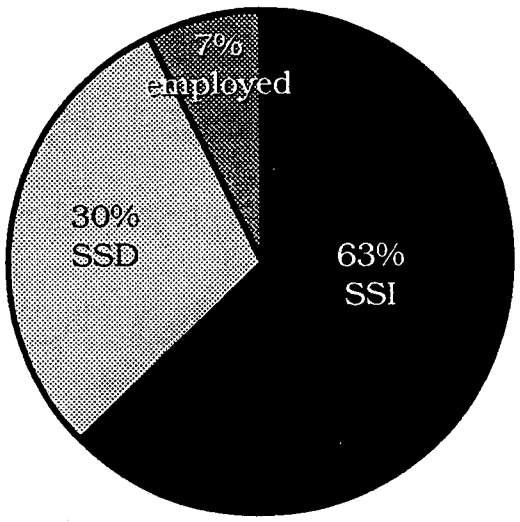


Employment

Employment prior to RTC admission was analyzed. Individuals with an established work history are eligible for social security disability (SSD) income. Client's with little or no work history are eligible for social security income (SSI). In this study, seven percent of the client's had been employed prior to admission and had jobs waiting for them following discharge, 30% were collecting SSD and 63% were collecting SSI.

Figure 4

Employment Status

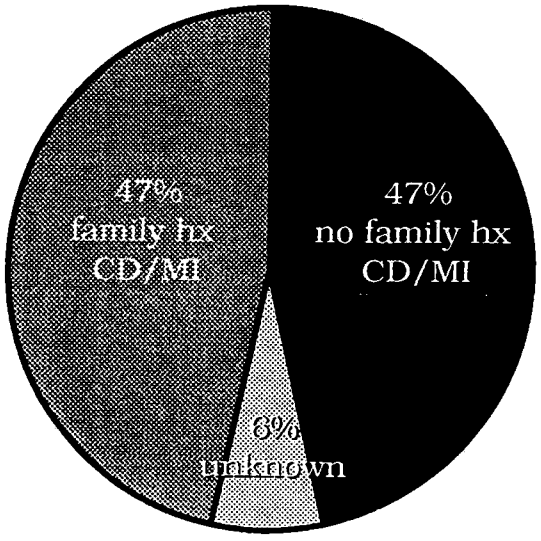


History of Family Mental Illness

Information was obtained by reviewing the social work assessment, in which the client stated whether they felt that mental illness existed in the family. Forty seven percent of the clients identified a history of family mental illness, forty seven percent stated having no history of family mental illness, and six percent were unsure of their family history for mental illness.

Figure 5

History of Family Mental Illness



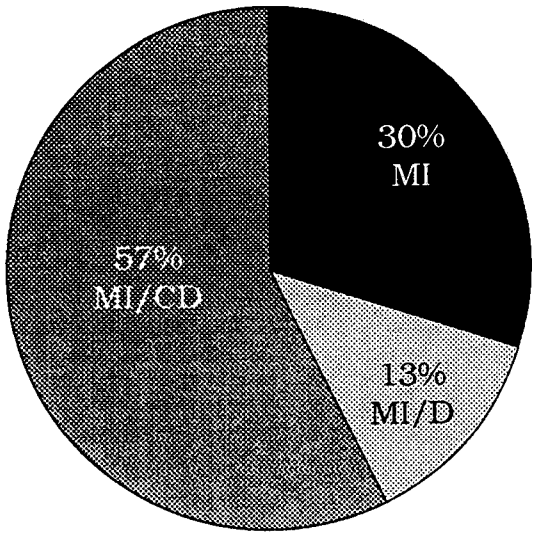
*patient identified history of family mental illness

Commitment Type

All clients on the unit at the time of the study were involuntarily court mandated to receive six months of intensive inpatient treatment. Fifty seven percent of the clients were committed as mentally ill/chemically dependent (MI/CD), 30% were committed as mentally ill (MI), and 13% were committed as mentally ill and dangerous (MI/D). This information was obtained by reviewing the client's commitment papers, which are legal documents sent from the adjudicating unit of each county.

Figure 6

Commitment Type



Drug of Choice

Drug of choice prior to RTC admission was analyzed. This information was gathered by reviewing the social work assessment in which the client had stated his/her drug of choice.

Table 1

Drug of Choice

Drug of choice for patients prior to admission.

Drug	% of patients
Alcohol	51
Cannabis	13
Crack	7
Inhalant	3
*Polysubstance	13
**Unspecified	13

*Polysubstance=repeated use of three substances (excluding nicotine and caffeine) within a one year time frame, no single substance pre-dominates (DSM-III).

**Unspecified=the social work assessment listed "chemical abuse" or "drug abuse" but did not list individual chemicals.

Six Factors of Recidivism

Diagnosis

The most commonly noted diagnosis for the patients on this unit at the time of this study was schizophrenia. A variety of other diagnosis were also present.

Table 2

Axis I Diagnosis

Axis I diagnosis of patients at time of study

Diagnosis	% of patients
Schizophrenia	45
Bipolar	10
Substance Abuse Disorder	10
Axis I diagnosis-deferred	10
Atypical Depressive Disorder	7
Anorexia Nervosa	3
Drug Induced Psychosis	3
Traumatic Brain Injury (TBI)	3
Anxiety Disorder	3
Psychosis (NOS)	3
Dissociative Identity Disorder	3

Table 3

Axis II Diagnosis

Axis II diagnosis of patients at time of study

Diagnosis	% of patients
Post Traumatic Stress Disorder	3
Anti-Social Personality Disorder	30
Axis II diagnosis-deferred	67

Table 4

Axis III Diagnosis

Axis III diagnosis of patients at time of study

Diagnosis	% of patients
Kleinfelter's Syndrome	3
Hepatitis B	3
Lumbar Spinal Injury	3
Hepatitis A,B,C	3
Back Injury	3
Axis III diagnosis-deferred	83

Subjects with Schizophrenia

Forty three percent of the patients in this study are diagnosed with schizophrenia. Of this forty three percent, almost half were commited to the RTC as mentally ill/dangerous thus having commited an act of violence.

Family Support

Data was gathered regarding level of family support, which was defined as; contact with family (eg. > 1 contact per month), minimal contact with family (eg. < 1 contact per month), no contact with family. This data was gathered from the social work assessment based on information from the patient about the amount of family contact.

Table 5

Level of Contact with Family

Level of contact	%
Contact with family	53
Minimal contact with family	20
No contact with family	27

Data was also gathered regarding the family beliefs regarding MI/CD issues. These were defined as; view MI/CD as an illness, view MI/CD problems as irrelevant issues, unknown (due to no contact). This data was gathered from the social work assessments and family beliefs regarding MI/CD issues were defined by the patient.

Table 6

Family Beliefs Regarding MI/CD Issues

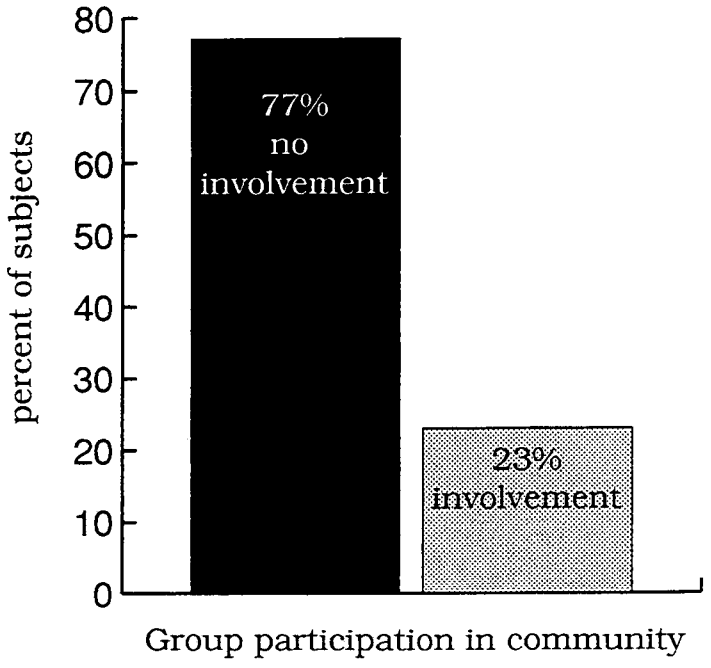
Belief regarding MI/CD	%
Family views MI/CD as an illness	77
Family views MI/CD problems as irrelevant	20
Unknown (due to no family contact)	3

Community Involvement

Information was gathered from the social work assessments regarding whether the client had been involved with group participation in the community prior to admission. Group participation was defined as self-help groups (AA, NA), support groups (Friends of the Mentally Ill).

Figure 8

Group Participation in Community



As part of the commitment process, all clients are assessed by a community psychiatrist prior to admission to a RTC. This study examined the frequency of regular therapeutic contact with community psychiatrists prior to admission. The records of each client were reviewed to determine whether the client had had on-going (eg. regular-weekly or monthly) therapeutic contact with a community psychiatrist prior to this admission. The results were as follows:

Table 7

Therapeutic Contact with Psychiatrist in Community

Type of Contact	%
On-going therapeutic contact	27
*No contact with community psychiatrist	73

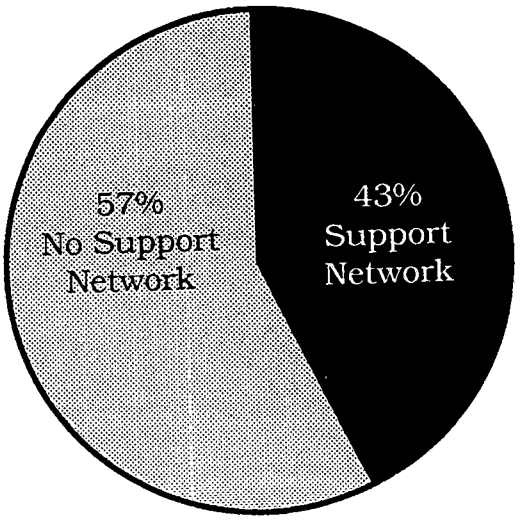
*commitment assessment was the only reported contact with a community psychiatrist.

Social Network

The client's records were reviewed to determine whether or not they identified with a specific social support network in the community. A social support network was operationally defined as family, friends, etc. Fifty seven percent of the records reported that the client had had no social support network and 43% identified a social support network.

Figure 9

Social Support Network

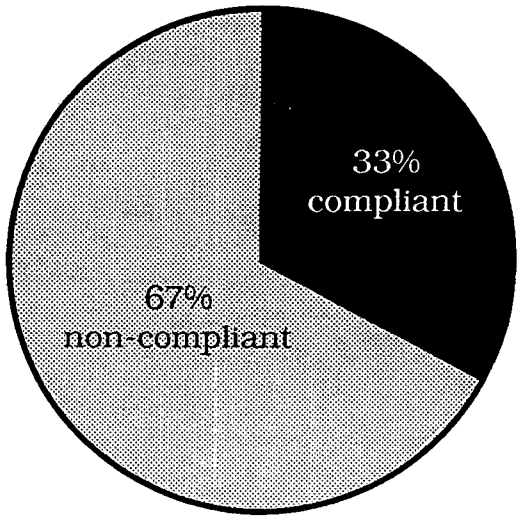


Medication Compliance

Data was gathered from the social work assessments to determine medication compliance prior to current RTC admission. Sixty seven percent of the clients reported that they were non-compliant with their medications prior to admission and thirty three percent reported that they were medication compliant.

Figure 10

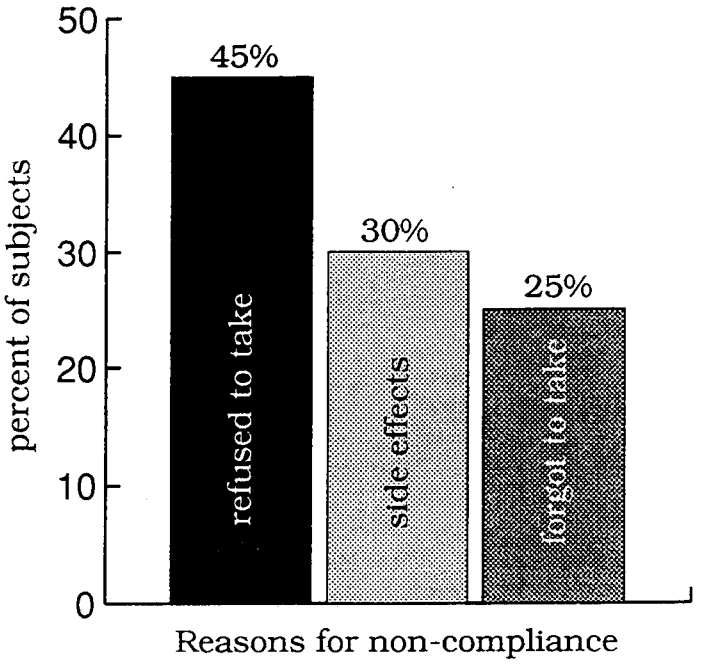
Medication Compliance



Reasons for medication non-compliance were also noted, such as; patient forgot to take, side effects of drug, patient refused to take.

Figure 11

Reasons for Medication Non-Compliance

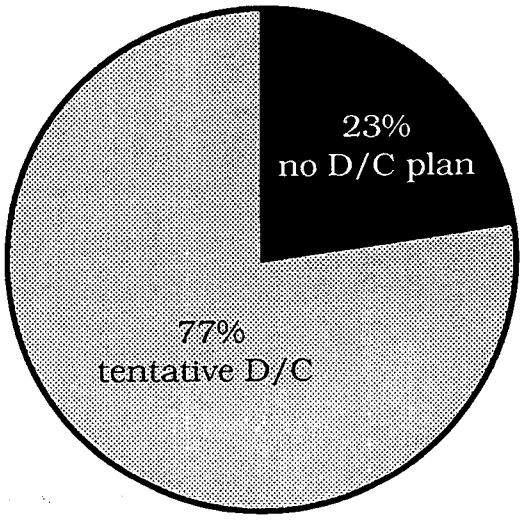


Discharge Planning

It is the responsibility of each social worker to begin formulating discharge arrangements while the client is in the early phases of treatment. At the time of the survey, 77% of the clients had a tentative discharge plan in place and 23% of the clients discharge plans had not yet been determined.

Figure 12

Discharge Planning



Information was gathered regarding projected living arrangements following discharge as noted in the initial social work assessment. The different housing options were: Rule 36 facility, clients own apartment/house, living with relatives.

Table 8

Living Arrangements Following Discharge

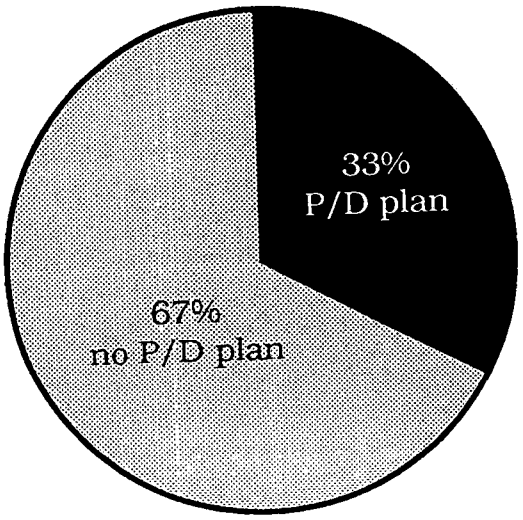
Type of arrangement	%
Rule 36 residential facility	77
Client's apartment/house	20
Living with relatives	3

A provisional discharge plan states that if a client is discharged before the end of his/her commitment and is later found not in compliance with the discharge (PD) plan recommendations, the original provisional discharge will be revoked and the client will return to the RTC to complete the remainder of his/her commitment.

Data was gathered regarding the status of provisional discharge plans for the three clients who were recidivists of this RTC.

Figure 13

Status of Provisional Discharge (PD) Plan



Summary

These findings are comparable to statistics from other studies, which were noted throughout this paper. In the section which follows, the importance of these findings will be discussed.

SECTION FIVE: DISCUSSION

Overview

In this section, the relevance of the study findings regarding demographics and the six factors of recidivism will be reviewed and discussed. Lastly, a statement will be made regarding the theoretical framework that the results of this study were based upon.

Demographics

Gender

The subjects in this study consisted of twenty three male patients (77%) and seven female patients (23%). The gender composition of the subjects is due to the capacity for males and females on this unit.

Race

The racial composition of the subjects in this study consisted of 77% Caucasians, 13% Native Americans and 10% African Americans. The racial demographics of these subjects is reflective of the geographic statistics for this area.

Level of Education

Data was gathered regarding educational level. Statistics indicate that the mean grade completed for this study population was the 10th grade. Twenty three percent of the client's in this

study had completed post high school education; more specifically, 7% had completed college plus one year of law school.

Employment

The findings regarding employment status prior to admission indicate that 7% of the clients in this study were employed prior to admission and 93% of the clients were receiving social security income (SSI) or social security disability (SSD).

History of Family Mental Illness

Forty seven percent of the clients identified a history of family mental illness, 47% stated having no history of family mental illness, and 6% were unsure of their family history for mental illness.

Commitment Type

Fifty seven percent of the clients were committed as mentally ill/chemically dependent (MI/CD), 30% were committed as mentally ill (MI), and 13% were committed as mentally ill and dangerous (MI/D). All of the clients are clinically dually diagnosed, but each county has slight variations in the commitment type that they assign to people. This information was gathered as a tracking devise for the RTC, since specific counties can not be mentioned in this report, this data is irrelevant to the discussion of this study.

Religion/Martial Status

The data which was gathered regarding religion and marital status was incomplete and for that reason unusable as a form of data analysis. Records often stated religious identification in general terms such as "Christian". Marital status was difficult to determine since the term "single" was often used, yet at times reports failed to state whether subjects were divorced.

Drug of Choice

The most frequently cited drug of choice for the subjects in this study was alcohol. Forty three percent of the clients in this study had prior alcohol abuse and 13% stated cannabis abuse.

Six Factors of Recidivism

Diagnosis

The most common Axis I diagnosis for clients in this study was schizophrenia; forty three percent of the clients in this study had received this diagnosis.

Very few psychiatric assessments contained Axis II diagnosis for clients in this study. Three percent of the clients had Post Traumatic Stress Disorder (PTSD), 30% had Anti-Social Personality Disorder (ASPD), 67% had a deferred Axis II diagnosis.

Eighty three percent of the clients in this study had a deferred Axis III diagnosis, 3% had Kleinfelter's Syndrome, 3% had Hepatitis

B, 3% had Lumbar Spinal Injury, 3% had Hepatitis A/B/C, and 3% had an unspecified back injury.

Dually diagnosed individuals who have an Axis I diagnosis of schizophrenia and an Axis II diagnosis of Anti-Social Personality Disorder (ASPD) tend to exhibit more violent behavior than populations with other diagnosis of mental illness (Smith, 1994). The results of this study indicate that forty three percent of the clients on this unit were diagnosed as schizophrenic. Of that forty three percent, thirteen percent were commited to the RTC as mentally ill and dangerous (MI/D), which indicates that the individual had commited an act of violence.

Family Support

Studies indicate that the level of family support and involvement is crucial to the prognosis of individuals who have been dually diagnosed. Low levels of family support are often correlated to poor prognosis for the client, whereas high levels of family involvement are common in individuals with a positive prognosis (Berti, 1994).

The data of this study indicates that 53% of the MI/CD clients were in contact with their families, 20% had minimal family contact, while 27% had no family contact. This study found that 73% had at least minimal contact with family, suggesting a potential for positive prognosis.

Studies indicate that many families have a difficult time comprehending the severity of a dual diagnosis and dealing with the pressures involved with having a MI/CD individual in their family

(Fowler, 1992). In this study, seventy seven percent of the families view the dual diagnosis as an illness and twenty percent viewed the MI/CD issues as irrelevant to their daily lives.

Community Involvement

It has been suggested that there is a strong relationship between recidivism and community characteristics. The community ecology perspective emphasizes the importance of factors such as social unity, social networks, and social disorganization which all influence the functioning capacity of the dually diagnosed individual. The ecosystems perspective states the necessity of viewing the client in terms of the environment in which he lives (Sheafor, 1994). Therefore, discharge planning and follow up care are an integral part of the treatment process.

Statistics indicate that a high availability of mental health resources in a geographic area lead to a lower percentage of patients who are rehospitalized in public facilities. It is believed that this finding is due to the trend towards integrating mental health systems with community resources and improving the comprehensiveness of patient care (Smith, 1994).

Information regarding group participation prior to admission was gathered. Seventy seven percent of the dually diagnosed clients in this study had no previous group involvement in the community prior to admission. Only 23% had previously been involved in self-help or support groups prior to admission.

Social Network

An inability to relate to societal norms places individuals with MI/CD issues in direct conflict with people in the community, leading to decreased societal connectedness. Involvement with a

case manager can help alleviate some of the disconnectedness that occurs between the client and the community (Turner, 1993).

The clients' social work assessments were reviewed to determine client beliefs regarding the existence of a social support network prior to admission. Fifty seven percent of clients in this study stated that no social support network was in place for them prior to admission, and forty three percent identified a social support network that was available to them.

Twenty percent of the clients had been in therapy with a community psychiatrist prior to their current RTC admission and seventy three percent had no on-going contact with a community psychiatrist.

Medication Compliance

Sixty seven percent of the patients in this study were non-compliant with their medications prior to admission to this RTC. Reasons for non-compliance were as follows: patient refused to take, side effects and patient forgot to take.

Casper (1993) states that one of the most prominent characteristics of the recidivist population is medication non-compliance. Researchers believe that medication non-compliance is due to the patients lack of insight regarding their illness and the benefits of proper medication, denial that medication is needed or that an illness exists, decompensation and general confusion (Kent, 1994).

Discharge Planning

It is the responsibility of each social worker to begin formulating discharge arrangements while the client is in the early phases of treatment. At the time of this study, 77% of the clients had a tentative discharge plan in place and 23% of the clients discharge plans had not yet been determined.

The results from this study indicate that the social workers on this RTC unit are organizing tentative discharge plans during the initial phases of a client's treatment process. At the time of the study, 77% of the clients would tentatively be discharged to a Rule 36 facility, 20% of the clients would be returning to their own apartment or home and 3% were scheduled to move in with family members following discharge.

Of the three clients who were recidivists of this particular RTC, only one had been provisionally discharged. Provisional discharges provide the ability to recommit a client who has been non-compliant with the recommendations on the provisional discharge summary.

Review of Study's Theoretical Framework

After reviewing the findings of this study, this researcher believes that the appropriate theoretical frameworks for this population are based on a combination of the vulnerability model and the self-medication models of chemical abuse.

The vulnerability model and the self medication model are contrasting viewpoints that are both widely accepted as possible causes of chemical abuse in dually diagnosed clients (Silver, 1994).

The vulnerability model states that mentally ill clients are inherently predisposed for psychotic behavior and that their psychosis is exacerbated by their chemical abuse. It is believed that drug use precedes the onset of mental illness (Silver, 1994).

Advocates of the self medication theory hypothesize that mentally ill patients self medicate by abusing chemicals to achieve an internal sense of equilibrium, which in turn further exacerbates the natural psychosis of the mental illness. Individuals who are dually diagnosed use chemicals to alleviate apathy, withdrawal and psychotic symptoms (Smith, 1994). It is hypothesized that mental illness precedes the onset of drug use (Silver, 1994; Smith, 1994).

A combination of both models appear to be the most appropriate theoretical framework for this population due to the fact that some aspects of psychosis are exacerbated by chemical use (eg. vulnerability model) yet many clients in this population appear to be self-medicating through their abuse of chemicals (eg. self-medication model) (Silver, 1994; Smith,1994).

SECTION SIX: CONCLUSIONS

Overview

This final section will include a discussion of the study implications, limitations, and recommendations regarding future research.

Implications

This study has implications for providing treatment options for this population of dually diagnosed clients.

This study indicated the importance of treating both disorders, obtaining medication compliance and structuring a strong continuum of care following discharge. The importance of stabilizing the symptoms of a dually diagnosed client are relevant to society due to increased acts of violence and criminal behavior when not properly stabilized.

The growing trend in health care financing systems towards more outpatient treatment programs and fewer intensive inpatient hospitalizations has lead to increased rates of recidivism in the dually diagnosed population (Fishel, 1993).

Although there are very specific definitions which define dual disorders or dual diagnosis, this is an illness with a vastly wide scope of issues. Clients who are dually diagnosed offer many challenges to the professionals who treat them, due to the difficulties in separating the symptoms of mental illness from those of chemical dependency.

Limitations

In light of the relevant and useful data which was gathered, it is necessary to also review limitations of this specific study. Limitations regarding sample size, population demographics, generalizability of data and researcher biases and interpretations will be reviewed.

One limitation of this study relates to the demographics of the subjects. The majority of the population consisted of Caucasian males. Due to this factor, the results of this research can not be generalized to other races or genders.

Delimitations

There were several delimitations that were intentionally placed in this study. This researcher chose to limit the subject population to the MI/CD individuals at this RTC, thus excluding patients from other units who are not dually diagnosed. Limiting the subject population to clients who are dually diagnosed decreased the sample size from the original population of the entire hospital (235 patients), down to one unit that serves dually diagnosed clients (37 patients).

Data was gathered from a small sample size because this study focused on one specific residential unit at a RTC. In addition, all data gathering occurred on one randomly chosen day and subjects were selected for the study based on whether or not they were residing on the unit on that specific day. One way to have increased the number of subjects would have been to gather data for a longer

time period, for example, from a three month period rather than from one day. Due to time constraints this researcher was unable to gather data over an extended period of time.

Due to the small sample size and limited time period, this study may have low external validity. The results would have had more generalizability if the sample population included dually diagnosed clients from other regional treatment centers and had extended over a longer period of time.

A threat to internal validity may have occurred, since this researcher created the data gathering form which was used and no pre-testing of the instrument was performed. Therefore, valuable information may have unintentionally been excluded from this study. In addition, since all data was gathered from existing records no pre-testing or post-testing of the instrument was done.

Due to time constraints, this data was gathered over one day and consisted of a sample size of thirty records. However, data regarding the recidivism of dually diagnosed clients was gathered.

Recommendations for Future Research

Improvements to the current study could lead to future research with dually diagnosed clients. By lengthening the time period studied, a greater sample size could be analyzed and more data could be gathered.

Comparing and contrasting the dually diagnosed populations at various regional treatment centers in Minnesota could reflect differences in populations and possibly differences in treatment

modalities used. By gathering data on various RTC's, a broader sample could be studied.

It would be interesting to examine treatment differences between dually diagnosed individuals with different axis I diagnosis (eg. schizophrenia vs. bipolar).

If this study were conducted at a different treatment center that had a mixed population of voluntary and involuntary clients, data could be gathered regarding the recidivism rates between the two groups. Unfortunately, it was not possible to gather that type of data for this study since all clients in the sample were involuntarily committed.

It would be useful to conduct a recidivism study between a treatment center that offered fee-for-service versus a state funded or HMO funded facility. This study approach could indicate differences between length of stay and recidivism rates between the various funding agencies.

Lastly, some variables of interest which were not intended to be studied also arose throughout the course of this study. While reviewing case records, a high incidence of suicidal attempts and post traumatic stress disorder were noted. While no further research was done regarding these variables, this researcher speculates that there may be a relationship between post traumatic stress disorder, suicide attempts, Vietnam Veteran status and physical/sexual abuse. It may have been interesting to have gathered data regarding the above stated variables that appeared throughout the course of this study.

Conclusions

It is crucial to note the relevance of treating both aspects of the dually diagnosed clients illness. The addictive behavior must be monitored and behavior modification techniques must be learned. In addition, the clients' mental health conditions must be stabilized. Furthermore, physicians need to be properly trained regarding the treatment of dually diagnosed clients for the individual to obtain the correct treatment and diagnosis.

Since the greatest indicator of recidivism is lack of social support and community involvement, it is important to help clients strengthen these aspects of their lives by helping them to develop social support networks and community involvement prior to discharge.

Social workers who work with dually diagnosed clients need to remember the importance of comprehensive health care that involves linking the client up with a community social worker or case manager, psychiatrist, housing support specialist, vocational rehabilitation worker, etc. Statistics indicate that comprehensive intensive services decrease the chance of recidivism in dually diagnosed clients, due to the fact that a greater number of professionals are involved with the client and they are better able to monitor mental health decompensation (Fishel, 1993).

Study results indicate that there is currently a recidivism rate of 10% for patients discharged from the dual diagnosis unit of this RTC. These results are reflective of data which were gathered during the hospital wide recidivism study which was conducted in 1994.

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Appendix A

Recidivism Study

age_____ gender: m f DOB_____

commit type_____ med recor.#_____

race: caucasian african american hispanic native american

educational level completed_____ employed_____

religion_____ marital status_____

length of stay at survey_____ involved with CCM_____
IQ_____

drug choice_____ family CD hx_____

Diagnosis

axis I:
axis II:
axis III:
GAF:

Family Support:

1) Level of familial contact...
   0-not involved with family
   1-minimal contact
   2-contact with family

2) Family beliefs regarding MI/CD issues...
   1-view MI/CD as an illness
   2-see no problem
   3-other

Community Involvement:

3) D/C living arrangements...
   1-rule 36
   2-apartment/own home
   3-relatives

4) Group participation in community...
   1-yes
   2-no
   list_____

Social Networks:

5) Contact with community psychiatrist...
   1-yes
   2-no

6) Strong social supports (eg. friends, family, etc)
   1-yes
   2-no

Medication Compliance:

7) Medication compliance prior to admission:
yes no

8) Reason for non-compliance...
1-forgot to take
2-side effects
3-other
4-refused to take
5-N/A

Discharge Plans:

9) Is discharge plan in place at this time...
1-yes
2-no

10) If recidivist, was patient on a provisional discharge plan...
1-yes
2-no

Appendix B

AUGSBURG

C • O • L • L • E • G • E

DATE: 1/17/96

TO: Gina Meyer

FROM: Rita Weisbrod, Ph.D.
Chair
Institutional Review Board

RE: Your IRB Application: Factors which influence the recidivism rate for patients discharged from the Metro Regional Treatment Center

Your application falls under the categories for exemption because your study uses existing data records which have been stripped of identifiers. Hence, I have reviewed it personally for exemption and approve it with no conditions.

Your IRB approval number is

95 - 34 - 1.

If there are substantive changes to your project which change your procedures regarding the use of human subjects, you should report them to me by phone (330-1227) or in writing so that they may be reviewed for possible increased risk.

I wish you well in this project!

Copy: Clarice Staff

Appendix C

State of Minnesota

Department of Human Services

Human Services Building
444 Lafayette Road
St. Paul, Minnesota 55155

January 29, 1996

Ms Gina Marie Meyer

Subject: Factors That Influence the Recidivism rate for patients discharged from

Dear Ms Meyer:

The Institutional Review Board reviewed your research proposal on January 3, 1996. It was approved pending the receipt of the "Agreement Relating to Private or Confidential Data" form, signed by the Chief Executive Officer and Medical Director from . I received that form on Monday, January 29, so you are free to begin your research.

If your study departs from the original research proposal you must advise the Board. At that time a new application must be submitted for IRB approval.

The Board requests that you submit quarterly progress reports to facilitate continuing review of approved research. These reports need not be lengthy or detailed, but should highlight current research activities and any emergent problems. The Board will anticipate receipt of your first report by April 18 for inclusion at our May meeting. When your research is complete, the Board requests a report of your research conclusions.

Best wishes on your project.

Sincerely,

Debbie Rielley
Assistant to the Institutional Review Board

cc: Alan Radke, Chair, IRB
AMRTC Research Committee Chair